

DERWENT-ACC-NO: 1994-249883

DERWENT-WEEK: 199725

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TITLE: Aircraft docking alignment with  
passenger gangway at airport building - using laser  
transmitter-receiver to horizontally and vertically scan  
nose tip, comparing with reference mask to provide position  
error, and displaying distance or deviation of aircraft  
to stop position

INVENTOR: KUEHN, K; STORM, D ; WARNKE, H

PATENT-ASSIGNEE: DEUT AEROSPACE AG[DAIM] , DAIMLER-BENZ  
AEROSPACE AG[DAIM]

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PATENT-FAMILY:

PUB-NO	PAGES	PUB-DATE	MAIN-IPC
DE 4301637 A1		August 11, 1994	N/A
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DE 4301637 C2		May 22, 1997	N/A
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DE 4301637A1	N/A	
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ABSTRACTED-PUB-NO: DE 4301637A

BASIC-ABSTRACT:

The tip of the nose of the aircraft (1) on the apron is scanned by a laser transmitter-receiver (2) in horizontal and vertical directions. The reflection is processed by a computer (5) linked for calibration and demonstration purposes to a personal computer (6) and monitor (7).

The measured position is compared with a desired position derived from a standard template specific to the type of aircraft, which is shown together with manoeuvring instructions on a display (8) visible to the pilot.

ADVANTAGE - Strong measurement signal is obtd. for trouble-free juxtaposition of aircraft and gangway.

CHOSEN-DRAWING: Dwg.1/6

TITLE-TERMS: AIRCRAFT DOCK ALIGN PASSENGER GANGWAY  
AIRPORT BUILD LASER TRANSMIT  
RECEIVE HORIZONTAL VERTICAL SCAN NOSE TIP  
COMPARE REFERENCE MASK  
POSITION ERROR DISPLAY DISTANCE DEVIATE  
AIRCRAFT STOP POSITION

DERWENT-CLASS: Q25 W06

EPI-CODES: W06-A06; W06-B02D; W06-B02X;

SECONDARY-ACC-NO:

Non-CPI Secondary Accession Numbers: N1994-197447

	Type	L #	Hits	Search Text	DBs
3	BRS	L3	2368	door near3 (aircraft or airplane or (air adj (craft or plane)))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
4	BRS	L4	19	(align\$4 near3 (bridge or gangway)) with 3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
5	BRS	L5	42	(align\$4 near3 (bridge or gangway)) same transmit\$4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
6	BRS	L6	40	(4 or 5) not us.pc.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB